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Dave Wilson, pilot, Vietnam veteran, FAA consultant, Aloha Pilot Safety Chairman

Airplane emergency procedures and crash investigations

Dave graduated from college (Univ. of Redlands) and became a high school math and science teacher. In 1967, he went to take the Navy's test to fly aircraft carrier jets and his life changed forever. As you remember, this was the middle of the Vietnam War.

At first he was a flight instructor, then he asked to be a member of the accident investigation team. According to Navy regulations, the only thing the investigation can be used for is safety. No information uncovered can be used in a lawsuit.

In 1978, Dave went to fly as a pilot for Aloha Airlines, and for the last five years before his retirement, he served as chair of the Central Air Safety Committee.

An investigation into an airplane accident must be started without preconception. Dave revealed that it usually takes a long time to sift through the details. There is a lot of discussion required. By the way, "black boxes" are really orange. And they are crash-resistant, not crash-proof. It takes weeks or months to get a feeling for what happened even when you have the recording from the cockpit. It's a low-fidelity system, and it's often hard to tell who said what. And even with the recording, it's hard to tell what happened to the aircraft.

Dave talked to us about "safety systems management," but the term is changing to risk management. People have to manage risk to an acceptable level, but how is that level determined? Especially when weighed against cost. He gave us an example of the dangers vs. safety aspects of jet fuel and what could be done to prevent an accident like the TWA flight that blew up over the East Coast. (It wasn't a missile.) It was an explosion of accumulated jet fumes, which are much more volatile than the actual fuel. Pressurized nitrogen can be used to stabilize jet fuel, but this pressurized tank can blow up, too. It also adds weight to the plane. Safety analysts have to reconcile political and engineering problems.

The Navy also trained Dave for rescue coordination. There is a difference between an accident and an incident, which is defined by the FAA and made into law. The NTSB makes recommendations to the FAA, but the FAA doesn't have to adopt them.

Dave held us absolutely spellbound when he told us about Aloha flight 243 in April of 1988. The plane took off on a routine trip from Hilo to Honolulu, but the fuselage ripped apart in flight. The entire top half of the airplane blew off. Dave's description of the pilot's decisions, and what the pilot, crew, and passengers experienced had our group white-knuckled, especially since Dave could tell us in vivid detail what happens when a cabin is violently depressurized. The usual checklist of emergency procedures was mostly useless. When the top of the cabin ripped off, it took a flight attendant and the

radio antenna with it. Dave's description of the pilot's ability to feel the torsion of the damaged plane's body through the "seat of his pants," which led to his decision not to use traditional flap settings to descend, had us holding our breaths. Instead, the pilot brought the plane into the Maui airport faster than he would have normally and landed within seconds of the entire plane breaking up.